

D1  
cont and said adhesive is caused to cover substantially all of a lateral surface of said semiconductor chip.

2. (Amended) The method of manufacturing a semiconductor device as defined in claim 1,

wherein said adhesive is provided in the first step at a thickness greater than the interval between said semiconductor chip and said substrate after the second step.

D2  
8. (Twice Amended) A semiconductor device, comprising:  
a semiconductor chip having electrodes; a substrate having an interconnect pattern; and an adhesive;  
wherein said electrodes and said interconnect pattern are electrically connected; and  
wherein said adhesive is interposed between a surface of said substrate on which said interconnect pattern is formed and a surface of said semiconductor chip on which said electrodes are formed, and said adhesive covers substantially all of a lateral surface of said semiconductor chip.

D3  
14. (Amended) A circuit board on which is mounted a semiconductor device, the semiconductor device comprising:

a semiconductor chip having electrodes; a substrate having an interconnect pattern; and an adhesive;

wherein said electrodes and said interconnect pattern are electrically connected; and

wherein said adhesive is interposed between a surface of said substrate on which said interconnect pattern is formed and a surface of said semiconductor chip on which said electrodes are formed, and said adhesive covers substantially all of a lateral surface of said semiconductor chip.

15. (Amended) An electronic instrument having a semiconductor device, the semiconductor device comprising:

D3  
C64  
a semiconductor chip having electrodes; a substrate having an interconnect pattern; and an adhesive;

wherein said electrodes and said interconnect pattern are electrically connected; and

wherein said adhesive is interposed between a surface of said substrate on which said interconnect pattern is formed and a surface of said semiconductor chip on which said electrodes are formed, and said adhesive covers substantially all of a lateral surface of said semiconductor chip.

---

Please add new claims 21 and 22 as follows:

D4  
--21. The circuit board as defined in claim 14,  
wherein a part of said adhesive covering substantially all of the lateral surface of said semiconductor chip has a thickness substantially the same as said semiconductor chip.--

--22. The electronic instrument as defined in claim 15,  
wherein a part of said adhesive covering substantially all of the lateral surface of said semiconductor chip has a thickness substantially the same as said semiconductor chip.--

---

REMARKS

Claims 1, 2, 4-8, 10-12, 14-16, 21 and 22 are pending herein, with non-elected claims 1-7 being withdrawn from consideration by way of a Restriction Requirement.

By this Amendment, claims 1, 2, 8, 14 and 15 are amended, claims 3, 9 and 17-20 are canceled, and claims 21 and 22 are added.

More in particular, claims 1 and 8 are amended to recite that the adhesive is interposed between a semiconductor chip and a substrate in such a manner as to also cover

substantially all of a lateral surface of the semiconductor chip. The amended claims distinguish the claimed invention from the teachings of JP 10-84014 as discussed more fully below. Claim 2 is amended for consistency with the amendment to claim 1. Claims 14 and 15 are amended to be independent claims for a better definition of these embodiments.

No new matter is added by this Amendment. Support for the amendment to claims 1 and 8 and for new claims 21 and 22 may be found throughout the specification, for example in Figure 5B and the supporting description thereof.

The attached Appendix includes marked-up copies of each rewritten claim (37 C.F.R. §1.121(c)(1)(ii)).

In view of the foregoing amendments and the following remarks, reconsideration of this application is respectfully requested.

I. Claim Objections

Claims 14 and 15 were objected to as allegedly being improperly drafted. This objection is respectfully traversed.

First, there is no requirement, as alleged in the Office Action, that a claim can only state its dependency in the preamble. The claims were proper. Second, Applicant has amended each of claims 14 and 15 to be independent claims, thus further obviating this objection.

For at least the foregoing reasons, reconsideration and withdrawal of this objection are respectfully requested.

II. Rejection Under 35 U.S.C. §112, Second Paragraph

Claims 8-12, 14-18 and 20 were rejected under 35 U.S.C. §112, second paragraph as allegedly being indefinite. This rejection is respectfully traversed.

The Office Action alleged that the term "lateral" lacked antecedent support in the claims. Applicant respectfully disagrees. In the claims, the first use of the term "lateral surface" is not referred to as "said lateral surface" or "the lateral surface." It is referred to

properly as "a lateral surface" in the first instance in each independent claim. As such, the term does not lack antecedent basis in the claims.

For the foregoing reasons, reconsideration and withdrawal of this rejection are respectfully requested.

### III. Rejections Based Upon Mitsutoshi

Claims 8-11 and 16-20 were rejected under 35 U.S.C. §102(b) as allegedly being anticipated by JP 10-84014 (Mitsutoshi).

Claims 14 and 15 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Mitsutoshi.

These rejections are respectfully traversed.

In the Office Action, it was alleged that the semiconductor device shown in Figures 1 and 8 of Mitsutoshi anticipated the claimed invention. However, these Figures illustrate that the adhesive 21 in Mitsutoshi at best covers only a very minor portion of a lateral surface of the semiconductor chip 30. {The reference does not teach or suggest that the adhesive covers substantially all of the lateral surface of the semiconductor chip as required in the presently claimed invention (and shown in, for example, Figure 5B of the present specification). }

For at least the foregoing reasons, Applicant submits that Mitsutoshi does not teach or suggest the presently claimed invention. Reconsideration and withdrawal of these rejections are respectfully requested.

### IV. Rejection Under 35 U.S.C. §103(a)

Claim 12 was rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Mitsutoshi in view of U.S. Patent No. 5,783,465 (Canning). This rejection is respectfully traversed.

The Patent Office referred to Canning as allegedly teaching including a shading pigment in the adhesive of Mitsutoshi. Even if this were accepted, it is clear that Canning does not remedy the deficiencies of Mitsutoshi discussed extensively above.

Accordingly, Applicant respectfully submits that neither Mitsutoshi nor Canning, whether taken singly or in combination, teaches or suggests the claimed invention.

Reconsideration and withdrawal of this rejection are requested.

V. Rejoinder

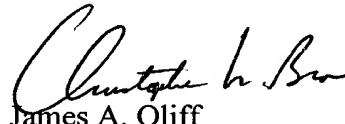
Applicant submits that upon allowance of claims 8, 10-12, 14-16, 21 and 22, claims 1-7, drawn to a method of making the semiconductor device of claim 8, must be rejoined and similarly allowed.

VI. Conclusion

In view of the foregoing amendments and remarks, Applicant submits that claims 1, 2, 4-8, 10-12, 14-16, 21 and 22 are in condition for allowance.

Should the Examiner believe that anything further would be desirable in order to place this application in better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number listed below.

Respectfully submitted,



James A. Oliff  
Registration No. 27,075

Christopher W. Brown  
Registration No. 38,025

JAO:CWB/rxg

Attachment:  
Appendix

Date: May 13, 2002

**OLIFF & BERRIDGE, PLC**  
**P.O. Box 19928**  
**Alexandria, Virginia 22320**  
**Telephone: (703) 836-6400**

<p>DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461</p>
--